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EXAMINER
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PATEL, ASHOKKUMAR B

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,008

Applicant(s)

SHIN, SANG-HYUN

Examiner

Ashok B. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 12-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-16 are subject to examination. Claims 10 and 11 have been cancelled.

#### ***Response to Arguments***

2. Applicant's arguments filed 1-9 and 12-16 have been fully considered but they are not persuasive for the following reasons.

#### **Rejection of Claims 1, 2, 5, and 13 under § 103(a) over Namma in view of Aoki**

##### **Applicant's argument:**

Applicant submits that Namma and Aoki fail to teach, suggest, or provide motivation for, inter alia, receiving a request for an IP address of a second terminal from a first terminal." In the Office Action, the Examiner states that column 5, lines 1-4 of Namma supposedly discloses receiving a request for an IP address of a second terminal. Namma, however, discloses that the proxy server apparatus receives a communication request for the server apparatus 4 from the client terminal 1. Col. 5, lines 1-6. Unlike what is recited in the claim, Namma or Aoki does not make any mention of a request for an IP address of a second terminal.

##### **Examiner's response:**

Namma teaches in col. 5, line 1-54, "In step 2-1, the proxy server apparatus 2 waits for a communication request with the server apparatus 4 from the client terminal 1 connected to the network 5. When there is the communication request with the server apparatus having name YAMADA, the proxy server apparatus 2 receives the communication request in step 2-2. Then, the proxy server apparatus 2 checks whether

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the server apparatus 4 is being connected to the network 5 by checking the communication condition control table 200.

As shown in FIG. 3, each row of the connection condition control table shows a name of the server, the corresponding IP address in the network 5, and the corresponding telephone number in the public telephone network 3. In the connection condition control table 200, if there is a value at the column of the IP address, the corresponding server is being connected to the network 5 and if there is no value at the column of the IP address, the corresponding server is not connected to the network. In the case shown in FIG. 3, server apparatus NANMA and server apparatus YAMADA are connected and IP addresses 133.185.001.001 and 133.185.001.002 are assigned. On the other hand, the server apparatus YAMADA is not connected to the proxy server apparatus 2.

In step 2-3, if the server apparatus is connected to the proxy server apparatus 2, a communication with the server apparatus is made in step 2-9.

As mentioned, in this embodiment, it is assumed that the server apparatus YAMADA 4 is not connected, in step 2-4, the proxy server 2 makes a call with the telephone number 03-7890-1234 toward the public telephone network. When the connection is provided, the server apparatus YAMADA 4 transmits a log-in name and a password. The proxy server apparatus 2 receives the log-in name and the password in step 2-5. Then, the proxy server apparatus certifies the server from the log-in name and the password and assigns one of IP addresses to the server apparatus YAMADA 4 in step 2-6. The proxy server apparatus 2 assigns the IP address as follows. At first, the proxy server apparatus 2 checks one of IP address as to whether the IP address is being used. If

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the IP address is not used, the proxy server apparatus 2 assigns the IP address to the server apparatus 4. For example if the proxy server apparatus 2 holds ten IP addresses from 133. 185.001.001 to 133.185.001.010, the IP addresses 133.185.001.003 is not used, the proxy server apparatus 2 assigns this IP address to the server apparatus 4. After assigning the IP address, in step 2-7, the proxy server apparatus 2 tries to establishing the PPP connection with the server apparatus YAMADA. When, the PPP connection has been established, the proxy server apparatus 2 registers the IP address 133.185.001.003 at the column of the IP address at the row of the server apparatus YAMADA 4 in the communication condition control table 200 in step 2-8. In the following step 2-9, the proxy server apparatus 2 effects data communication with the server apparatus YAMADA 4 and transmits a reply to the client terminal 1." Thus Namma teaches "(a) receiving a request for an IP address of a second terminal from a first terminal; (b) upon receipt of the request, checking whether an IP address corresponding to the second terminal is registered; and (c) if the IP address is not registered, assigning an IP address to the second terminal corresponding to information from an IP address server.

**Rejection of Claims 3 and 4 under § 103(a) over Namma and Aoki. and further in view of Ray**

**Applicant's argument:**

"Ray discloses a telecommunication method for providing a substantially immediate

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electronic receipt after a consumer has made a purchase. Claims 3 and 4, which depend from or ultimately depend from claim 1, are believed to be patentable for at least the reasons submitted for claim 1 and because Ray fails to make up for the deficiencies of claim 1.", and "Rather, Ray discloses that the Gatekeepers 240, 270 establish an IP connection, not the destination terminal 260."

**Examiner's response:**

Ray teaches the method of claim 1 further comprising the step of sending a notice requesting the second terminal to establish an IP connection if the IP address is not registered (Col 3, lines 45-50, customer provides alias address which is telephone Number, Col 4 lines 17-22, alias address sent by SMS to a Gatekeeper, Gatekeeper converts alias address to IP address, Col. 4 lines 25-30).

**Rejection of Claim 6 under § 103(a) over Namma and Aoki and further in view of "official Notice"**

**Applicant's Argument:**

"Applicant submits that claim 6, which ultimately depends from claim 1, is believed to be patentable for at least the reasons submitted for claim 1. Further, Applicant respectfully requests the Examiner to provide prior art which supports his "Official Notice" that transmitting the IP address to said one of a plurality of terminals using transmission control protocol/internet protocol (TCP/IP) or user datagram protocol/internet protocol (UDP/IP), in the context of claim 6, would have been obvious."

**Examiner's response:**

Please refer to Whitehead et al. (US 6, 085, 030), col. 2, line 52-62.

**Rejection of Claims 7 and 15 under §103(a) over Curry in view of Martin**

**Applicant's argument:**

Applicant submits that claim 7 is believed to be patentable because Curry in view of Martin fails to teach, suggest, or provide motivation for the recited name server as recited in claim 7. In the Office Action, the Examiner states that the DNS 51 supposedly corresponds to the claimed name server; Curry, however, makes no mention of the DNS 51 as having the claimed database for storing IP addresses and the claimed controller which assigns an IP address, in the context of wireless-to-wireless communication.

**Examiner's response:**

Curry teaches in col. 9, line 34-54, "(30) As shown in simplified form in FIG. 1, the domain name server (DNS) 51 comprises a server computer which functions as the central processing unit of the domain name server. The computer has an IP packet data interface to the network 31. The DNS system 51 also includes a data storage system storing a series of databases attached to or incorporated into the server. The databases include look-up tables for direct translations of names to addresses and may include routing control records for conditional processing of requests for communication with at least some customers. Essentially, when a person wishes to initiate a communication, they instruct their PC to start communication using a name address, either based on a textual name or a telephone number. The PC transmits a name translation request or 'query' to the domain name server system 51 via the appropriate access server 27 and the network 31. The server 51 receives the domain name query

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from the public packet data network 31. In response, the server may execute a direct look-up table based translation to an IP address and/or an associated telephone number, for example for voice communication.”

**Applicant’s argument:**

“In other words, both of these sections which supposedly disclose the name server make no mention of wireless-to-wireless communication.”, and “New claim 16, which depends from claim 7, is believed to be patentable at least by virtue of its dependency from claim 7.

**Examiner’s response:**

Further in conjunction with above refereed column and lines from Curry, Curry teaches in col. 7, line 29-31, “Preferably, the gateway system 5 also provides communication between two or more of the wireless handsets 1 as well as between any of the handsets 1 and local landline telephones 9 via one or more local central offices 7.”

**Rejection of Claims 8, 9, and 12 under §103(a) over Voit in view of Curry**

**Applicant’s argument:**

“Applicant submits that the Examiner’s generalized allegation that the elements of the computer and associated sets of software modules constitute the controller, database, and communication module is improper.”

**Examiner’s response:**

Please refer to the following claim rejection. These elements are intrinsic to the system as explained by referring to column and lines of Voit.



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**Rejection of Claim 14 under § 103(a) over Voit and Curry and further in view of Menon**

**Applicant's argument:**

"Claim 14, which depends from claim 8, is patentable at least for the reasons submitted for claim 8 and because Menon fails to make up for the deficiencies of Voit and Curry."

**Examiner's response:**

As indicated previously, Voit does not explicitly teach the name server of claim 8, wherein the telephone numbers are telephone numbers of wireless terminals. This deficiency is cured by Menon, wherein Menon teaches "Menon teaches a name server system 10 which translates the telephone numbers of a first and second wireless terminal 17 into IP addresses (Fig. 1, Paragraph 0100: two end user wireless terminals, Paragraph 0102 and 0103: registering of telephone numbers and IP addresses for wireless terminals and translation of phone numbers into IP addresses, Paragraph 0075: assigning of IP addresses to mobile terminals).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 5, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namma et al. (US Patent 6,185,616 filed 07/21/1997), hereinafter

Namma in view of Aoki (US 5,983,090 filed 04/1/1997).

**Referring to claim 1,**

Namma teaches a method of performing an Internet protocol (IP)-based communication between terminals, the method comprising the steps of:

- (a) receiving a request for an IP address of a second terminal 2 from a first terminal 1 ( col . 5, lines 1 -4)-,
- (b) upon receipt of the request, checking whether an IP address corresponding to the second terminal is registered (col. 5, lines 10-17, Fig. 3)., and
- (c) if the IP address is not registered, assigning an IP address to the second terminal corresponding to information from an IP address server (col. 5, lines 25-34).

Namma does not explicitly teach assigning IP addresses to wireless terminals for IP base communications.

Aoki teaches assigning IP addresses to wireless terminals for establishing a communications link between the terminals (at least col. 5, lines 27-34). It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Namma and Aoki because they both deal with establishing IP sessions between stations where the first station does not know the IP address of the destination. Furthermore, the teaching of Aoki to modify the IP address assigning process taught by Namma with wireless terminals would enable IP based communications to mobile terminals even though the call initiator does not know the IP address of the second terminal (Namma, col. 1 , lines 30-40).

**Referring to claim 2,**

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As per claim 2, Namma teaches the method of claim 1 , wherein in the step (a), the request for an IP address is made using a telephone number (col. 5, lines 9-13), and wherein in the step (b), checking whether an IP address corresponds to the second terminal is carried out by checking whether the telephone number corresponds to the second terminal (Fig. 3, col. 13-21).

**Referring to claim 5,**

As per claim 5 , Namma teaches the method of claim 1 , wherein if the IP address is registered, further comprising the step of transmitting the IP address to one of a plurality of terminals , said plurality of terminals including said first terminal 1 (Fig. 1 , col. 8, lines 17-20).

**Referring to claim 13,**

As per claim 13, Namma and Aoki as applied to claim 1 teach the method of claim 1, wherein the first terminal is a first wireless terminal and the second terminal is a second wireless terminal (at least col. 5, lines 27-34).

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namma and Aoki as applied to claim 1, and further in view of Ray et al. (hereinafter Ray), US 6,067,529.

**Referring to claim 3,**

As per claim 3, Namma fails to teach the method of claim 1, further comprising the step of sending a notice requesting the second terminal to establish an IP connection if the IP address is not registered.

Ray teaches the method of claim 1 further comprising the step of sending a

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notice requesting the second terminal to establish an IP connection if the IP address is not registered (Col 3, lines 45-50, customer provides alias address which is telephone number', Col 4 lines 17-22, alias address sent by SMS to a Gatekeeper', Gatekeeper converts alias address to IP address, Col. 4 lines 25-30).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Namma and Ray because they both deal with establishing IP sessions between a first terminal and a second terminal where the IP address of the second terminal is not known to the first terminal. Furthermore, the teaching of Ray to send a notice via SMS to request the second terminal to establish an IP connection would allow the first terminal to reach the second even when the second terminal had not previously taken the step of registering an address with the name server.

**Referring to claim 4,**

As per claim 4, Namma in view of Ray as applied to claim 3 teaches the method of claim 3 wherein the notice requesting the second terminal to establish an IP connection using a Short Message Service (SMS) (Col 4, lines 17-22).

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Namma and Aoki as applied to claim 5, and further in view of "Official Notice'.

**Referring to claim 6,**

Namma teaches that the method of claim 5 wherein IP address is transmitted to one or more terminals over an IP network (Fig. 1, col. 8, lines 17-20) but does not explicitly teach the method of claim 1 wherein the IP address is transmitted to said one

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of a plurality of terminals using transmission control protocol/internet protocol (TCP/IP) or user datagram protocol/internet protocol (UDP/IP). However the Examiner takes 'Official Notice' that TCP/IP is the most prevalent protocol used to interconnect hosts on the Internet. It would have been obvious to one of ordinary skill in this art at the time the invention was made to transmit the IP address to one of a plurality of terminals using transmission control protocol/internet protocol (TCP/IP), because TCP/IP provides a reliable (end-to end error recovery) and standard means of communicating IP addresses over the Internet.

7. Claims 7, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curry et al. (hereinafter Curry) US 6,359,880 in view of Martin et al. (hereinafter Martin) US 6,614,788.

**Referring to claim 7,**

As per claim 7, Curry teaches a communication system having a first wireless terminal 1 and a second wireless terminal 1 (Fig. 1 col. 5, lines 27-29), an Internet protocol (IP) address server (Col. 18, lines 51-54, "DHCP Server"), and a name server (Fig. 1, item 51) for providing an IP address at the request of the first wireless terminal (col. 7, line 29-31), wherein

the name server comprises:

a database for storing IP addresses corresponding to telephone numbers of a plurality of terminals, said plurality of terminals including the second wireless terminal (col. 9, lines 47-54), and

a controller which assigns an IP address to the second wireless terminal

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corresponding to information from the IP address server, if the IP address of the second wireless terminal that is requested by the first wireless terminal using a telephone number is not registered (col. 18, lines 51-54: server obtains a temporary address for terminal using a DHCP server).

Curry does not teach that the IP address obtained from the IP server is registered in the database.

Martin teaches the communication system of claim 7 wherein the IP address obtained from the IP server is registered in the database (Fig 11 , steps 152-156., Col 2, lines 35-42., Col 3, lines 12-15, telephone number stored with IP address). It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teachings of Curry and Martin because they both deal with the dynamic assignment of IP addresses.

Furthermore, the teaching of Martin to register the phone number and IP address in a database would result in a centralized database from which network addresses could be retrieved for future communications with clients (Martin, Col. 2 lines 3-4).

**Referring to claim 15,**

As per claim 15, Curry teaches the communication system of claim 7 further comprising a communication module unit which sends the assigned IP address to the first wireless terminal (col. 20 line 67-col. 21, line 3).

**Referring to claim 16,**

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As per claim 16, Curry teaches the communication system of claim 7, wherein said name server receives a request for the IP address of the second wireless terminal from the first wireless terminal. (col. 7, line 29-31)

8. Claims 8, 9, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voit (US 6,075,783) in view of Curry et al. (hereinafter Curry) US 6,359,880.

**Referring to claim 8,**

As per claim 8, Voit teaches a name server in an internet protocol (IP)-based communication system comprising'

a communication module unit for sending and receiving IP-based data (Col. 9 lines 40-43., Col. 12, lines 58-62);

a controller for registering telephone numbers and requests for translation of telephone numbers into IP addresses (Col. 9, lines 18-27),\* and

a database for storing IP addresses and telephone numbers as determined by the controller (Col. 9, lines 30-33), wherein the communication module unit sends and receives IP-based data to and from external devices (col. 10, lines 43-45: IP address sent to called PC)

Voit fails to teach that the external devices include address servers.

Curry teaches a communication system including a DHCP address server which obtains IP addresses for called parties and provides them to the communication controller (col. 18, lines 51-54).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Voit and Curry because they both deal

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with establishing IP based communications between wireless terminals. Furthermore, the teaching Curry to modify the communication system of Voit to include communications with external IP servers would allow dynamically assigning IP addresses allowing efficient usage of IP addresses with terminals that are not permanently connected.

**Referring to claim 9,**

As per claim 9, Voit teaches the name server of claim 8 wherein the name server further comprises a memory for storing a program for operating the controller (Col. 9, lines 17-19).

**Referring to claim 12,**

As per claim 12, Voit teaches the name server of claim 8 wherein the controller receives requests for translation of telephone numbers into IP addresses from the communication module unit (Col 9, lines 30-34).

9. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Voit and Curry as applied to claim 8 above, and further in view of Menon et al. (US Published Application 2001/0022784) hereinafter Menon.

**Referring to claim 14,**

As per claim 14, Voit does not explicitly teach the name server of claim 8, wherein the telephone numbers are telephone numbers of wireless terminals.

Menon teaches a name server system 10 which translates the telephone numbers of a first and second wireless terminal 17 into IP addresses (Fig. 1, Paragraph 0100: two end user wireless terminals, Paragraph 0102 and 01032 registering of



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telephone numbers and IP addresses for wireless terminals and translation of phone numbers into IP addresses, Paragraph 0075: assigning of IP addresses to mobile terminals).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Voit and Menon because they both deal with IP based communication between terminals. Furthermore, the teaching of Menon to modify the name server taught by Voit to support assigning IP addresses to wireless terminals and mapping the phone numbers to IP addresses allows support for packet data services such as facsimile and VOIP for mobile stations (See Menon, paragraphs 0009-001 1).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp

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